510(K) SUMMARY

This summary of 510(k) safety and effectiveness information is being submitted in accordance with the requirements of SMDA 1990 and 21 CFR §807.92.

The assigned 510(k) number is: K053635.

1. Submitter's Identification:

BIONIME CORPORRATION

NO 694, RENHUA ROAD, DALI CITY, TAICHUNG COUNTY, TAIWAN 412

Contact Person: Patrick Hsieh Phone Number: 886-4-24951268 FAX Number: 886-4-24952568

Date Summary Prepared: February 2, 2006

2. Name of the Device: Rightest Blood Glucose Monitoring System

3. Common or Usual Name: Glucose test system

Panel: Clinical Chemistry 75

Product Code: NBW, System, Test, Blood Glucose, Over-The-Counter.

Classification: Class II

4. Device Description:

Our Blood Glucose Monitoring System includes Meter, Blood Glucose Test Strips, Code Key, Check key, Two Control Solutions, Lancing Device and lancets.

Rightest meter, Blood Glucose Test Strips, Code Key and Check key are manufactured by BIONIME Corporation. The Rightest Meter, when used with the Rightest Test Strips Blood Glucose Test Strips, quantitatively measures glucose in fresh capillary whole blood.

The performance of the Rightest Blood Glucose Test Strips is verified by Control Solution. The Check key verifies the status of Rightest meter.

5. Intended Use:

The Rightest Blood Glucose Monitoring System is intended for in vitro diagnostic use (outside of body). It is indicated to be used by professional healthcare personnel or diabetics at home to measure the glucose concentration for aiding diabetes management. The glucose concentration is measured with quantitative capillary whole blood from the fingertip, palm and forearm by using Rightest Blood Glucose Monitoring System. This device is not intended for testing neonate blood samples. Special condition for use statement(s): Rightest System provides plasma equivalent results.

6. Predicate Device Information:

The Rightest Blood Glucose Monitoring System is substantially equivalent to the brand of Rightest Blood Glucose Monitoring System noted below.

Name:

Rightest Blood Glucose Monitoring System

Device Company:

Bionime Corporation

510(K) Number:

K042678

7. <u>Comparison to Predicate Devices:</u>

Similarities			
Item	Device	Predicate	
	Rightest(Alternative Site Testing)	Rightest	
Detection method	Amperometry	Amperometry	
Enzyme	Glucose Oxidase	Glucose Oxidase	
	(Aspergillus niger)	(Aspergillus niger)	
Mediator	Potassium ferricyanide	Potassium ferricyanide	
Test range	20 – 600 mg/dL	20 – 600 mg/dL	
Hematocrit Range	30 – 55%	30 – 55%	
Temperature	50 - 104° F	50 - 104° F	
range	10 - 40° C	10 - 40° C	
Humidity range	10 – 90%	10 – 90%	
Warranty(meter)	3 years	3 years	
Open use time (strip)	3 months	3 months	
Electrode	Noble metal electrode	Noble metal electrode	
Coding	Code key	Code key	
Test Time	15 seconds	15 seconds	
Sample Volume	2 uL 2 uL		
Memory	3, 7, 14 day average and last	3, 7, 14 day average and last	
capability	200 tests in the memory		
Power	1.5V×2 battery (LR03)	1.5V×2 battery (LR03)	
Battery life	Running 1,500 test Running 1,500 test		

	Differences	
Item	Device(Alternative Site Testing)	Predicate
	Rightest	Rightest
Sample Source	The glucose concentration is measured with quantitative capillary whole blood from the fingertip, palm and	The glucose concentration is measured with quantitative capillary whole blood from the fingertip by using

	forearm by using Rightest Blood Glucose Monitoring System.	Rightest Blood Glucose Monitoring System.
Description and Labelling	We mention the information about alternative site testing in user's manual and packing box. We also show a diagrammatic explanation about alternative test sites in user's manual.	We mention the information in user's manual.

8. <u>Discussion of Non-Clinical Tests Performed for Determination of Substantial Equivalence</u> are as follows:

Verification and validation of test results were evaluated to establish the performance, functionality and reliability of The Rightest Blood Glucose Monitoring System.

The evaluation included with precision, linearity, interference, environment factors (ex. Temperature, humidity and altitude), hematocrit and control solution.

9. <u>Discussion of Clinical Tests Performed:</u>

The clinical test was designed in Alternative site testing study as below

Test capillary blood by technician Study:

It shows similarly slope and intercept for difference position of capillary blood test by technician.

Fig 1 Linear regression from Rightest versus YSI 2300D

Technician	Rightest fingerstick vs YSI-Plasma	Rightest palmstick vs YSI-Plasma	Rightest armstick vs YSI-Plasma
Testing range		55.7 ~ 490 mg/dL	
Test number	134	134	132
Slope	1.03	1.02	0.96
Intercept	-1.63	1.18	6.55
r	0.9852	0.9862	0.9793

Test capillary blood by patient Study:

It shows similarly slope and intercept of difference positions of capillary blood test by Patient.

Fig 2 Linear regression from Rightest versus YSI 2300D

Technician	Rightest fingerstick vs YSI-Plasma	Rightest palmstick vs YSI-Plasma	Rightest armstick vs YSI-Plasma
Testing range		55.7 ~ 490 mg/dL	
Test number	134	133	132
Slope	1.06	1.03	0.99

Intercept	-4.15	-0.32	3.10
r	0.9865	0.9874	0.9829

The "Alternative Site Test" clinical evaluation shows substantially equivalent to Rightest used in finger, palm and arm position. They all have similar slope and intercept of Rightest value versus YSI 2300D. So the result tells us Rightest blood glucose monitoring system is suitable to be used in finger, palm and arm.

10. Conclusions:

Results of clinical testing demonstrate that the performance of the Rightest Blood Glucose Monitoring System (Alternative Site Testing) testing capillary whole blood is substantial equivalence of Rightest Blood Glucose Monitoring System. The precision and accuracy of Rightest is suitable for its in monitoring the effectiveness of diabetes management at home and in clinical settings.







Food and Drug Administration 2098 Gaither Road Rockville MD 20850

FFR 2 1 2006

Bionime Corporation c/o Ms. Susan D. Goldstein-Falk MDI Consultant, Inc. 55 Northern Blvd. Suite 200 Great Neck, NY 11201

Re:

k053635

Trade/Device Name: Rightest Blood Glucose Monitoring System

Regulation Number: 21 CFR§ 862.1345 Regulation Name: Glucose test system

Regulatory Class: Class II Product Code: NBW, CGA Dated: December 28, 2005 Received: December 29, 2005

Dear Ms. Goldstein-Falk:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in Title 21, Code of Federal Regulations (CFR), Parts 800 to 895. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Parts 801 and 809); and good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820).

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific information about the application of labeling requirements to your device, or questions on the promotion and advertising of your device, please contact the Office of In Vitro Diagnostic Device Evaluation and Safety at (240) 276-0484. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address http://www.fda.gov/cdrh/industry/support/index.html.

Sincerely yours,

Alberto Gutierrez, Ph.D.

Director

Division of Chemistry and Toxicology Office of In Vitro Diagnostic Device

Evaluation and Safety Center for Devices and Radiological Health

Enclosure

Indications for Use

510(k) Number (if known): <u>k053635</u>		
Device Name: Rightest Blood Glucose Monitoring System		
Indications For Use:		
The Rightest Blood Glucose Monitoring System is intended for in vitro diagnostic use (outside of body). It is indicated to be used by professional healthcare personnel or diabetics at home to measure the glucose concentration for aiding diabetes management. The glucose concentration is measured with quantitative capillary whole blood from the fingertip, palm and forearm by using Rightest Blood Glucose Monitoring System.		
This device is not intended for testing neonate blood samples.		
Special condition for use statement(s): Rightest System provides plasma equivalent results.		
Prescription Use X AND/OR Over-The-Counter Use X (Part 21 CFR 801 Subpart D) (21 CFR 801 Subpart C) (PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)		
Concurrence of CDRH, Office of In Vitro Diagnostic Devices (OIVD)		
Office of in Vitro Diagnostic Device Evaluation and Salary		
510(K) KUS 3635		